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| Subject: Addition/Subtraction | | **Teacher:** | | **Grade Level:**Fourth | **Date(s):** September 19-23, 2016 | |
| **Curriculum Area:** Math | | | | **I Can Statements &Learning Targets** *(I can……..):*  I can add and subtract numbers up to one million. | | |
| **Content :** *Common Core Standards & Essential Standards*  **4.NBT.4 –** Students will fluently add and subtract multi-digit whole numbers using the standard algorithm.  **SPIRAL** - **4.NBT.3** | | | | **Technology Standards &Resources:**  [**http://www.ncpublicschools.org/docs/acre/standards/new-standards/info-technology/gradek.pdf**](http://www.ncpublicschools.org/docs/acre/standards/new-standards/info-technology/gradek.pdf) **- Grade 4 - pgs. 9-10**  [Fourth Grade Tasks](http://3-5cctask.ncdpi.wikispaces.net/Fourth+Grade+Tasks)  [Mr. Anker Tests 4th Grade Activities](http://www.henryanker.com/4th_Activities.html) (Assessments)  <http://www.doe.k12.de.us/assessment/files/Math_Grade_4.pdf> - (Scrollfor specific standard)  Internet4Classrooms [Common Core Math Tasks](http://www.internet4classrooms.com/common_core/3rd_5th_math_tasks.htm)  ixl[Fourth Grade Math Skills](http://www.ixl.com/math/grade-4) - categorized | | |
| Essential Question(s): *(What question(s) should students be able to answer at the end of the lesson/unit?)*   * What is a sensible answer to a real problem? * What strategies can I use to help me make sense of a written algorithm? | | | | **Higher Order Thinking/Revised Blooms:***(Questions that will enable students to find connections or extend learning.)*  What is the purpose of the algorithm you use for adding? Subtracting? | | |
| **Vocabulary:** *Academic/Content*  Add, Subtract, Fluently, Standard algorithm  [Interactive Math Dictionary](http://www.amathsdictionaryforkids.com/) - Demonstrate with students | | | | **Teacher Resources:**  *Utilize Everyday Math Kits for some manipulatives – ie. Number decks, dice, base-10 blocks etc.*  [Math Unpacking Document](http://www.ncpublicschools.org/docs/acre/standards/common-core-tools/unpacking/math/4th.pdf)  [Standards for Mathematical Practice](http://www.corestandards.org/Math/Practice/)  [Blackline Masters](http://wps.ablongman.com/ab_vandewalle_math_6/0,12312,3547876-,00.html)  [Everyday Math Common Core Crosswalk](https://emccss.everydaymathonline.com/em-crosswalk/grades.php?grade=4) | | |
| **Monday**  **Subject Integration:** | **Whole Group**  Mental math for fluency practice.  Play**Where are we Now?** Ex: Write “Where are we Now? on the board. Say: “Double a dozen, add 16, and subtract the number of feet in 36 inches…Where are we now? (Answer 37) Students with the final answer get a star (sticker) on paper, etc. | | | **Small Group**  Have students add the digits in the zip code then write a number sentence for the addition problem. Mix numbers and subtract. Extend – use digits in phone number. Relate sums and differences to facts they know. | | **Independent Work**  Write the year as a 4-digit number and subtract the day of the month from the year. Write the new number. Use different years.  Write and solve word problems to depict addition or subtraction scenarios that involve three addends. |
| **Tuesday**  **Subject Integration:** | **Whole Group**  Using the month, day, and year of birthdays, students write addition and subtraction number sentences.  Can adjust activity by having students use classmates’ birthday numbers to solve addition and subtraction problems. Additionally, the date is a number to use. | | | **Small Group**  [Target Subtraction](https://docs.google.com/a/bryantschools.org/document/d/1TSCVmEepuN1IIlBbYuIpHrELY02rOfRNBGMxb-WCKKw/edit?hl=en_US&pli=1)  Needed: 2 sets of 0-9 digit cards; comparisons recording sheet | | **Independent Work**  [IXL Math](http://www.ixl.com/math/grade-4)– reinforcement activities. Skills are organized into categories; on-going site to use. |
| **Wednesday**  **Subject Integration:** | **Whole Group** - **Addition and subtraction number stories.**Have students choose two 3-digit numbers less than 500. Writean addition number story using thenumbers. Write a related subtraction number storyusing the numbers. Solve both problems. Use a different strategy to check answers. | | | **Small Group**  [Adder Ladders](http://www.learn-with-math-games.com/fun-math-activities.html)- 2 and 3-digit addition and subtraction. | | **Independent Work**  Have students use their age as an answer to an equation.  Have students use their age and another number to write two addition equations and two subtraction equations. Solve; Illustrate (if needed); Explain. |
| **Thursday**  **Subject Integration:** | **Whole Group**  [Four Square for Story Problems](http://www.education.com/activity/article/Four_Square_fourth/) (downloadable)  Materials needed: Paper/pencils, markers, small poster board or construction paper | | | **Small Group**  <http://www.doe.k12.de.us/assessment/files/Math_Grade_4.pdf>  Common Core Assessment Comparison for Mathematics – Grade 4  (Scroll down for specific standard)  Can transition to independent is desired. | | **Independent Work**  [Math Fries – An addition and subtraction game](http://mrnussbaum.com/mathfries)  Students have to eat French Fries that have math problems on them that equal a certain number displayed on top of the screen. [most are addition, but some **subtraction** is included] |
| **Friday**  **Subject Integration:** | **Whole Group**  [A Mathematical Card Trick](http://www.education.com/activity/article/mathematical-card-trick/) – (downloadable)  Materials needed: Deck of playing cards (EDM cards will suffice); Pencil and scratch paper (for computation) | | | **Small Group**  Display some equations – ex: 5 + n = 9 and n – 8 = 6. Have students write word problems that can be solved by each equation. (Adjust numbers accordingly); Students create own; practice/switch. Choose some to use as periodic problems of the day OR move to independent work groups. | | **Independent Work**  [Addition and Subtraction Play](http://www.bbc.co.uk/bitesize/ks2/maths/number/addition_subtraction/play/)  Students will add and subtract their way across the Hexafield in this Mission 2110 game. |
| **Reflection-Checking for Understanding**  Students in need of **remediation:**  **Action/Activities:**  Have students use base-ten blocks to develop understanding of mental math strategies. The blocks will allow students to see how the numbers are being changed to use the mental math strategies. (Possible strategies: Break Apart and Make a Ten)  Sample problems: 46+23; 89-15: 76+43; 41-29; 35-14 | | | **Reflection-Checking for Understanding**  Students on **target:**  **Action/Activities:**  Pose the following: The Central Florida Zoo covers 109 acres. The National Zoo in Washington, DC covers 163 acres. If the Central Florida Zoo bought another 55 acres for expansion, which zoo would be larger? How much larger? Explain.  Students will generate original problems to solve. Can use zoos in NC or be creative in naming locations and numbers. | | | **Reflection-Checking for Understanding**  Students who need **enrichment:**  **Action/Activities:**  Challenge students to develop their own mental math strategy. Students will write a report explaining their strategy. They will include examples along with detailed explanations. |

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| **Common Standards for Mathematical Practices** - Make sense of problems and persevere in solving them; Reason abstractly and quantitatively; Construct viable arguments and critique the reasoning of others; Model with mathematics; Use appropriate tools strategically; Attend to precision; Look for and make use of structure; Look for and express regularity in repeated reasoning |